Transactions

Transactions is a library with utilities to encode, decode and sign Ethereum transactions.

Functions

encodeRLP

Encode a EIP-155 transaction in RLP.

Input:

- txStruct (EIP155): Is the transaction structure.

Output:

- output (bytes): The encoded RLP bytes.

encodeRLP

Encode a EIP-1559 request transaction in RLP.

Input:

- txStruct (EIP155Request): Is the transaction structure.

Output:

- output (bytes): The encoded RLP bytes.

encodeRLP

Encode a EIP-1559 transaction in RLP.

Input:

- txStruct (EIP1559): Is the transaction structure.

Output:

- output (bytes): The encoded RLP bytes.

encodeRLP

Encode a EIP-1559 request transaction in RLP.

Input:

- txStruct (EIP1559Request): Is the transaction structure.

Output:

- output (bytes): The encoded RLP bytes.

decodeRLP_EIP155

Decode a EIP-155 transaction from RLP.

Input:

- rlp (bytes): Is the encoded RLP bytes.

Output:

- txStruct (EIP155): The transaction structure.

decodeRLP_EIP155Request

Decode a EIP-155 request transaction from RLP.

Input:

- rlp (bytes): Is the encoded RLP bytes.

Output:

- txStruct (EIP155Request): The transaction structure.

decodeRLP_EIP1559

Decode a EIP-1559 transaction from RLP.

Input:

- rlp (bytes): Is the encoded RLP bytes.

Output:

- txStruct (EIP1559): The transaction structure.

decodeRLP_EIP1559Request

Decode a EIP-1559 request transaction from RLP.

Input:

- rlp (bytes): Is the encoded RLP bytes.

Output:

- txStruct (EIP1559Request): The transaction structure.

signTxn

Sign a EIP-155 transaction request.

Input:

- request (EIP1559Request): Is the transaction request.
- signingKey (string): Is the private key to sign the transaction.

Output:

- response (EIP1559): The signed transaction.

signTxn

Sign a EIP-155 transaction request.

Input:

- request (EIP155Request): Is the transaction request.
- signingKey (string): Is the private key to sign the transaction.

Output:

- response (EIP155): The signed transaction.

Structs

EIP155

EIP-155 transaction structure.

- to (address): Is the target address.
- gas (uint256): Is the gas limit.
- gasPrice (uint256): Is the gas price.
- value (uint256): Is the transfer value in gwei.
- nonce (uint256): Is the latest nonce of the sender.

- data (bytes): Is the transaction data.
- chainId (uint256): Is the id of the chain where the transaction will be executed.
- r (bytes32): Is the 'r' signature value.
- s (bytes32): Is the 's' signature value.
- v (uint256): Is the 'v' signature value.

EIP155Request

EIP-155 transaction request structure.

- to (address): Is the target address.
- gas (uint256): Is the gas limit.
- gasPrice (uint256): Is the gas price.
- value (uint256): Is the transfer value in gwei.
- nonce (uint256): Is the latest nonce of the sender.
- data (bytes): Is the transaction data.
- chainId (uint256): Is the id of the chain where the transaction will be executed.

EIP1559

EIP-1559 transaction structure.

- to (address): Is the target address.
- gas (uint256): Is the gas limit.
- maxFeePerGas (uint256): Is the maximum fee per gas.
- maxPriorityFeePerGas (uint256): Is the maximum priority fee per gas.
- value (uint256): Is the transfer value in gwei.
- nonce (uint256): Is the latest nonce of the sender.
- data (bytes): Is the transaction data.
- chainId (uint256): Is the id of the chain where the transaction will be executed.
- accessList (bytes): Is the access list.
- r (bytes32): Is the 'r' signature value.
- s (bytes32): Is the 's' signature value.
- v (uint256): Is the 'v' signature value.

EIP1559Request

EIP-1559 transaction request structure.

- to (address): Is the target address.
- gas (uint256): Is the gas limit.
- maxFeePerGas (uint256): Is the maximum fee per gas.
- maxPriorityFeePerGas (uint256): Is the maximum priority fee per gas.
- value (uint256): Is the transfer value in gwei.
- nonce (uint256): Is the latest nonce of the sender.
- data (bytes): Is the transaction data.
- chainId (uint256): Is the id of the chain where the transaction will be executed.
- accessList (bytes): Is the access list.